

Claims:

What is claimed is:

1. A method of marking an original text document [300], said original text document comprised of words [125] separated by inter-word intervals, said inter-word intervals including one [110] or more [115] blank characters, said method consisting in altering the numbers of said blank characters, said method comprising the steps of:

applying a reversible transform [305] over said original text document in order that all said inter-word intervals become exclusively comprised of odd numbers of said blank characters [425];

splitting [310] transformed said original text document into a first subset [520] and a second subset [530] of said words including the trailing said inter-word intervals of said words;

and, over said first subset:

computing [315], from said original text document and a secret-key [312], an authentication pattern [610] that fits the number of said intervals of said first subset;

adding [320] inter-word blank characters in positions corresponding to said authentication pattern;

generating [325] canonical form of said first subset;

computing [330], from said canonical form of said first subset and said secret-key, a blurring pattern [630] that fits the number of said intervals of said first subset;

modifying [335] the numbers of inter-word blank characters according to said blurring pattern;

and, over said second subset:

generating [345] canonical form of said second subset;

computing [350], from said canonical form of said second subset and said secret-key, a blurring pattern that fits the number of said intervals of said second subset;

modifying [355] the numbers of inter-word blank characters according to said blurring pattern;

recombining [340] said first subset and said second subset thereby, obtaining a marked text for authentication.

2. A method of authenticating a marked text document [700], said marked text document comprised of words [125] separated by inter-word intervals, said inter-word intervals including one [110] or more [115] blank characters, said method consisting in checking the numbers of said blank characters, said method comprising the steps of:

splitting said marked text document [710] into a first subset and a second subset of said words including the trailing said inter-word intervals of said words;

and, over said first subset:

generating [725] canonical form of said first subset;

computing [730], from said canonical form of said first subset and a secret-key [712], a blurring pattern that fits the number of said intervals of said first subset;

erasing [735] modifications brought to the numbers of said inter-word blank characters per said blurring pattern;

extracting [720] an authentication pattern thereby, obtaining in all said inter-word intervals odd numbers of blank characters;

and, over said second subset:

generating [745] canonical form of said second subset;

computing [750], from said canonical form of said second subset and said secret-key [712], a blurring pattern that fits the number of said intervals of said second subset; erasing [755] modifications brought to the numbers of said inter-word blank characters per said blurring pattern thereby, obtaining in all said inter-word intervals odd numbers of blank characters;

recombining said first subset and said second subset;

applying a reverse transform [705] thus, retrieving said original text document;

computing [715], from retrieved said original text document and said secret-key [712], an authentication pattern that fits the number of said intervals of retrieved said original text document;

comparing [760] extracted said authentication pattern [720] and computed said authentication pattern [715];

if matching exactly:

accepting said marked text document as authentic;

if not:

rejecting said marked text document as fake.

3. The method of anyone of the previous claims wherein splitting steps [310] [710] includes the preliminary steps of:

generating [302] [702] a canonical form of a text document;

computing [307] [707], from said canonical form of said

text document and said secret-key, a splitting pattern [510] that fits the number of said intervals of said text document;

thereby, allowing to split and to recombine said text document [300] [700] on the basis of asserted and non-asserted bits of said splitting pattern.

4. The method according to any one of the previous claims wherein said authentication pattern [610], said blurring pattern [630] and said splitting pattern [510] are binary vectors comprised of a number of bits matching the number of corresponding said inter-word intervals.

5. The method according to any one of the previous claims wherein said canonical form [120] is obtained in stripping all blank characters, in excess of one, off said inter-word intervals.

10 6. The method according to any one of the previous claims wherein modifying steps include:

in the positions corresponding to the asserted bits of said blurring patterns:

15 adding one blank character if said inter-word intervals are comprised of an odd number of said blank characters;
removing one blank character if said inter-word intervals are comprised of an even number of said blank characters.

7. The method according to any one of the previous claims wherein modifying steps and erasing steps perform identically.

20 8. The method according to any one of the previous claims wherein extracting step includes:

removing one blank character in those of said inter-word intervals that are comprised of an even number of said blank characters;

25 obtaining a binary authentication vector with asserted bits corresponding to positions where said blank characters were removed.

9. An authentication system, in particular a system for authenticating text document, comprising means adapted for carrying out the method according to any one of the previous claims.

5 **10.** A computer-like readable medium comprising instructions for
carrying out the method according to any one of the claims 1
to 9.

[illegible]